3. (Twice Amended) An isolated polynucleotide encoding a polypeptide selected from the group consisting of:

a) a polypeptide comprising the amino acid sequence of SEQ ID NO:1,

b) a polypeptide comprising a naturally occurring amino acid sequence at least 98% identical to the amino acid sequence of SEQ ID NO:1, wherein the polypeptide has cytochrome P450 activity, and wherein the naturally occurring amino acid sequence comprises contiguous residues P42-L499 of SEQ ID NO:1, and

c) a fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1, wherein the fragment has cytochrome P450 activity, and wherein the fragment comprises contiguous residues P42-L499 of SEQ ID NO:1.

4. (As Once Amended) An isolated polynucleotide of claim 3, encoding a polypeptide consisting of the amino acid sequence of SEQ ID NO:1.

5. An isolated polynucleotide of claim 4 consisting of the polynucleotide sequence of SEQ ID NO:2.

6. A recombinant polynucleotide comprising a promoter sequence operably linked to a polynucleotide of claim 3.

7. A cell transformed with a recombinant polynucleotide of claim 6.

9. (As Once Amended) A method for producing a polypeptide encoded by a polynucleotide of claim 3, the method comprising:

a) culturing a cell under conditions suitable for expression of the polypeptide, wherein said cell is transformed with a recombinant polynucleotide, and said recombinant polynucleotide comprises a promoter sequence operably linked to a polynucleotide of claim 3, and

b) recovering the polypeptide so expressed.

11. (Once Amended) An isolated polynucleotide selected from the group consisting of:

a) a polynucleotide comprising the polynucleotide sequence of SEQ ID NO:2,

b) a polynucleotide comprising a naturally occurring polynucleotide sequence at least 95% identical to the polynucleotide sequence of SEQ ID NO:2,

c) a polynucleotide complementary to a polynucleotide of a),

d) a polynucleotide complementary to a polynucleotide of b), and

e) an RNA equivalent of a)-d).

13. A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 11, the method comprising:

a) hybridizing the sample with a probe comprising at least 20 contiguous nucleotides comprising a sequence complementary to said target polynucleotide in the sample, and which probe specifically hybridizes to said target polynucleotide, under conditions whereby a hybridization complex is formed between said probe and said target polynucleotide or fragments thereof, and

b) detecting the presence or absence of said hybridization complex, and, optionally, if present, the amount thereof.

14. A method of claim 13, wherein the probe comprises at least 60 contiguous nucleotides.

15. A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 11, the method comprising:

a) amplifying said target polynucleotide or fragment thereof using polymerase chain reaction amplification, and

b) detecting the presence or absence of said amplified target polynucleotide or fragment thereof, and, optionally, if present, the amount thereof.

27. (As Once Amended) A method for screening a compound for effectiveness in altering expression of a target polynucleotide, wherein said target polynucleotide comprises a sequence of claim 47, the method comprising:

a) exposing a sample comprising the target polynucleotide to a compound, under conditions suitable for the expression of the target polynucleotide,

b) detecting altered expression of the target polynucleotide, and

c) comparing the expression of the target polynucleotide in the presence of varying amounts of the compound and in the absence of the compound.

28. A method for assessing toxicity of a test compound, said method comprising:

a) treating a biological sample containing nucleic acids with the test compound;

b) hybridizing the nucleic acids of the treated biological sample with a probe comprising at least 20 contiguous nucleotides of a polynucleotide of claim 11 under conditions whereby a specific hybridization complex is formed between said probe and a target polynucleotide in the biological sample, said target polynucleotide comprising a polynucleotide sequence of a polynucleotide of claim 11 or fragment thereof;

c) quantifying the amount of hybridization complex; and

d) comparing the amount of hybridization complex in the treated biological sample with the amount of hybridization complex in an untreated biological sample, wherein a difference in the amount of hybridization complex in the treated biological sample is indicative of toxicity of the test compound.

46. (Once Amended) A polynucleotide of claim 11, selected from the group consisting of:

a) a polynucleotide comprising the polynucleotide sequence of SEQ ID NO:2,

b) a polynucleotide complementary to the polynucleotide of a), and

c) an RNA equivalent of a)-b).

47. A polynucleotide of claim 3, encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:1.

48. (Once Amended) A polynucleotide of claim 3, encoding a polypeptide comprising a naturally occurring amino acid sequence at least 98% identical to the amino acid sequence of SEQ ID

NO:1, wherein the polypeptide has cytochrome P450 activity, and wherein the naturally occurring amino acid sequence comprises contiguous residues P42-L499 of SEQ ID NO:1.

49. (Once Amended) A polynucleotide of claim 11, selected from the group consisting of:

a) a polynucleotide comprising a naturally occurring polynucleotide sequence at least 95% identical to the polynucleotide sequence of SEQ ID NO:2,

b) a polynucleotide complementary to the polynucleotide of a), and

c) an RNA equivalent of a)-b).

50. (Once Amended) A polynucleotide of claim 11, selected from the group consisting of:

a) a polynucleotide comprising a naturally occurring polynucleotide sequence at least 98% identical to the polynucleotide sequence of SEQ ID NO:2,

b) a polynucleotide complementary to the polynucleotide of a), and

c) an RNA equivalent of a)-b).

51. (Twice Amended) An isolated polynucleotide of claim 52, selected from the group consisting of:

a) a polynucleotide comprising at least 750 contiguous nucleotides of the polynucleotide sequence of SEQ ID NO:2,

b) a polynucleotide complementary to the polynucleotide of a), and

c) an RNA equivalent of a)-b).

52. (New) An isolated polynucleotide selected from the group consisting of:

a) a polynucleotide comprising at least 750 contiguous nucleotides of the polynucleotide sequence of SEQ ID NO:2,

b) a polynucleotide comprising nucleotides 843-1582 of SEQ ID NO:2,

c) a polynucleotide complementary to the polynucleotide of a),

d) a polynucleotide complementary to the polynucleotide of b), and

e) an RNA equivalent of a)-d).

53. (New) An isolated polynucleotide of claim 52, selected from the group consisting of:

a) a polynucleotide comprising nucleotides 843-1582 of SEQ ID NO:2,

b) a polynucleotide complementary to a polynucleotide of a), and

c) an RNA equivalent of a)-b).